

Tropical Cyclone Michael | Report #7

REPORT TIME & DATE: 9:00 AM EDT | Saturday, October 13, 2018

INCIDENT START DATE: Wednesday, October 10, 2018

PRIMARY LOCATION(S): Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia

REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

Hurricane Michael made landfall near Mexico Beach, Florida as a category 4 storm on Wednesday October 10, then moved across Georgia, South Carolina, North Carolina, and southeastern Virginia on October 11, before moving into the Atlantic. Michael caused significant damage to portions of the Florida Panhandle and southwestern Georgia and numerous power outages across the affected region.

Electricity Sector Summary

- Customer Outages as of 7:00 PM EDT:
 - Alabama: 13,220 customer outages (0.5%), increase of 33%
 - o Florida: 263,933 customer outages (2.6%), decrease of 23%
 - Georgia: 199,561 customer outages (4.2%), decrease of 31%
 - North Carolina: 238,005 customer outages (4.8%), decrease of 34%
 - o South Carolina: 2,182 customer outages (0.1%), decrease of 55%
 - Virginia: 206,571 customer outages (5.5%), decrease of 43%
- Damage assessments and restoration efforts are underway across the affected region.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Mutual assistance networks have been activated and over 35,000 personnel are supporting the restoration efforts from 26 states.

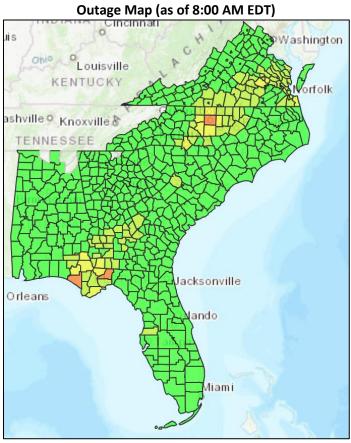
Oil & Natural Gas Sector Summary

- For the week ending on October 5, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.1 million barrels of total gasoline stocks, according to the Energy Information Administration. This is 9% higher than the 5-year average for this time of year.
- As of 6:00 AM October 13, 6.0% of Florida gas stations (including 39% of Florida Panhandle stations), 3.8% of Georgia gas stations, and 2.1% of Alabama gas stations were reported out-of-service due to lack of fuel and/or power. Not all stations have been updated following the storm.

ELECTRICITY SECTOR

POWER OUTAGES





ELECTRICITY OUTAGES AS OF 7:00 PM EDT 10/13/2018						
Impacted State	Current	Percent of Total Customers	24-Hour Peak			
impacted State	Customers Outages	in State without Power	Customer Outages			
Alabama	13,220	0.52%	27,531			
Florida	263,933	2.60%	351,433			
Georgia	199,561	4.22%	304,862			
North Carolina	238,005	4.81%	492,171			
South Carolina	2,182	0.09%	7,422			
Virginia	206,571	5.50%	541,115			
Total	923,472	-	*			

^{*}There is no sum of the Peak Customer Outage column because peaks for individual utilities occur at different times; a total would not reflect peak outages.

ELECTRICITY IMPACTS & RESTORATION EFFORTS

• Crews in the impacted area continue to perform damage assessments and restorations. Some damage assessments and restorations in the hardest hit areas may be limited due to access constrains.

- The electric industry has mobilized over 35,000 personnel, including utility crews, contractors, and mutual assistance workers from 26 states to support the restoration efforts.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.

Alabama

- Significantly Impacted Utilities
 - Wiregrass Electric Coop: 8,774 Customer Outages
 - o Alabama Power: 4,564 Customer Outages

Florida

- Significantly Impacted Utilities
 - Gulf Power (Southern Company): 93,969 Customer Outages
 - Tallahassee Electric: 40,513 Customer Outages
 - o Talquin Electric Coop: 38,950 Customer Outages
 - West Florida Electric Coop Association: 25,048 Customer Outages
 - Duke Energy Florida: 21,499 Customer Outages

Georgia

- Significantly Impacted Utilities
 - o Georgia Power: 45,978 Customer Outages
 - Mitchell EMC: 24,021 Customer Outages
 - Grady EMC: 14,604 Customer Outages
 - o Sumter EMC: 7,426 Customer Outages

North Carolina

238,005 Customer Outages | **434**% since Oct 12, 4:00 PM EDT | **492,171** 24-hr Peak Outages

- Significantly Impacted Utilities
 - Duke Energy: 214,423 Customer Outages
 - Energy United: 11,358 Customer Outages
 - o Piedmont EMC: 9,256 Customer Outages

South Carolina

2,182 Customer Outages ↓ **55**% since Oct 12, 4:00 PM EDT **7,422** 24-hr Peak Outages

- Significantly Impacted Utilities
 - South Carolina Electric and Gas: 2,076 Customer Outages
 - o Duke Energy: 80 Customer Outages



Virginia

Significantly Impacted Utilities

o Dominion Power: 158,657 Customer Outages

VA Electric Cooperatives: 31,302 Customer Outages

o Appalachian Power: 12,738 Customer Outages

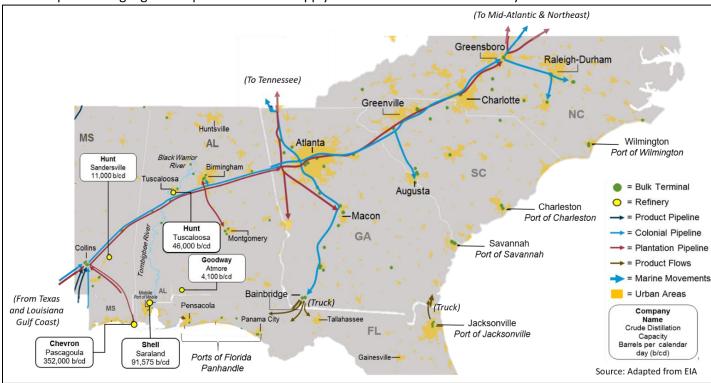
BACKGROUND AND PREPARATIONS

• The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these unities and manage the mutual assistance networks, Edition Electric Institute (EEI), American Public Power Association (APPA), and the National Rural Electric Cooperative Association (NRECA), have been in regular contact with DOE, the potentially affected entities, and their mutual assistance networks.

OIL & NATURAL GAS SECTOR

OIL AND NATURAL GAS SECTOR OVERVIEW

The map below highlights the petroleum fuels supply chain in the area threatened by Hurricane Michael.



OFFSHORE PRODUCTION AND OIL & GAS PLATFORMS

 As of 12:30 PM EDT, October 12, 550,313 b/d (32.4%) of the oil production and 334 MMcf/d (13.05%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico are shut-in, according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE).

U.S. Gulf of Mexico Oil & Gas Production Status as of 12:30 PM EDT 10/12/2018				
Production	Pre-Event	Shut-In (10/12)		
Crude Oil (b/d)	1,700,000	550,313		
Natural Gas (MMcf/d)	2,560	334		
Infrastructure	Pre-Event Count	Evacuated (10/12)		
Manned Platforms	687	9		
Rigs	37	0		

Source: BSEE

PORTS

• The Louisiana Offshore Oil Port (LOOP), the largest privately-owned crude terminal in the United States, said it resumed normal operations at its Marine Terminal on Oct. 11 after operations were suspended ahead of Hurricane Michael.

• The U.S. Coast Guard has set the following conditions for Gulf Coast and Southeast ports as a result of Hurricane Michael.

Status of Southeast Ports as of 7:30 AM EDT 10/13/2018							
	Port	Status	Date Stamp	2016 Volumes (b/d)			
Port Sector				Products*		Crude Oil	
				In	Out	In	Out
	Mobile, AL	Open.	10/10	4,000	136,000	210,000	12,000
Mobile	Pascagoula, MS	Open.	10/10	13,000	114,000	156,000	2,000
Mobile	Panama City, FL	Open with restrictions.	10/12	7,697	-	-	1
	Pensacola, FL	Open.	10/11	10,273	-	-	1
Jacksonville	Jacksonville, FL	Open.	10/11	86,000	1,000	-	1
Savannah	Savannah, GA	Open.	10/11	15,000	1,000	-	-
Charleston	Charleston, SC	Open.	10/11	22,000	-	-	-
North Carolina	Wilmington, NC	Open.	10/12	6,000	-	-	-
Hampton	Norfolk, VA	Open.	10/12	7,000	9,000	-	-
Roads	Newport News, VA	Open.	10/12	3,000	-	-	-

^{*}Transportation fuels (gasoline, distillate, jet fuel) volumes only.

Source: U.S. Coast Guard Homeport, U.S. Army Corp of Engineers, EIA Company Level Imports, American Maritime Partnership

FUEL STOCKS

- For the week ending on October 5, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.1 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 9% higher than the 5-year average for this time of year.
- For the week ending on October 5, the Lower Atlantic Region had 12.6 million barrels of total distillate stocks, according to EIA. This is equivalent to the 5-year average for this time of year.
- Florida Department of Emergency Management (FDEM) is monitoring statewide fuel stocks and retail fuel supplies; no reported supply shortages, distribution issues, or retail fuel shortage reported as of October 9.

RETAIL FUEL STATIONS

• As of 6:00 AM October 13, 6.0% of Florida gas stations (including 39% of Florida Panhandle stations), 3.8% of Georgia gas stations, and 2.1% of Alabama gas stations were reported out-of-service due to lack of fuel, lack of power, or both, according to GasBuddy.com.

Disclaimer: <u>Data may not be current</u>. 83% of stations in Pensacola, 66% of stations in Panama City, 77% of stations in Tallahassee, 31% of stations in Thomasville, 29% of stations in Albany, and 47% of Dothan have updated status since 10/09/18.

EMERGENCY DECLARATIONS & WAIVERS

EMERGENCY DECLARATIONS

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See 49 CFR 390.23 for the actual emergency regulation.

State Emergency Declarations and HOS Waivers as of 7:30 AM EDT 10/13/2018						
State*	Details	Effect	Chahus			
		Start	End	Status		
AL, FL, GA, LA, MS, NC, SC, TN	FMCSA Regional Emergency Declaration	10/09	11/09	Active		
Florida*	State of Emergency Declaration	10/07	12/06	Active		
South Carolina**	State of Emergency Declaration	10/08	11/07	Active		
Alabama	State of Emergency Declaration	10/08	11/07	Active		
Georgia*	State of Emergency Declaration	10/09	10/16	Active		
North Carolina*	State of Emergency Declaration	10/10	Until Rescinded	Active		
Kentucky	State of Emergency Declaration	10/10	11/10	Active		
Virginia	State of Emergency Declaration	10/11	11/11	Active		

Sources: U.S. Department of Transportation; Governor Office Websites

FUEL WAIVERS

The Environmental Protection Agency (EPA), working with the Department of Energy (DOE), responds quickly to address fuel supply disruptions caused by hurricanes or other natural disasters by issuing emergency waivers of certain fuel standards in affected areas. The table below lists fuel-related waivers issued by the EPA:

	Fuel Waivers as of 7:30 AM EDT 10/13/2018					
State	Waiver		Effective Dates			
State	waivei	Start	End	Status		
Florida	Restriction on red-dyed diesel fuel for highway use.		10/26	Active		
	Allows the sale, distribution, and use of red dyed non-road locomotive and	10/12				
	marine (NRLM) diesel fuel for use in emergency response diesel vehicles, but	10/12				
	the diesel fuel must meet the 15ppm standard					

Sources: <u>U.S. Environmental Protection Agency</u>; State Governments

^{*}Includes 35 counties in northern Florida, 108 counties in southern Georgia, and 66 counties in North Carolina. See Declarations for the full listing.

^{**}South Carolina issued a thirty day extension of its Hurricane Florence emergency declaration

OTHER FEDERAL WAIVERS

On October 10, PHMSA issued an Emergency Stay of Enforcement for pipeline and LNG facility operators affected by Hurricane Michael. Under the stay, PHSMA does not intend to take enforcement action relating to operators' temporary noncompliance with operator qualification requirements found in 49 C.F.R. §§ 192.801–192.809 and 195.501–195.509, or pre-employment and random drug testing requirements found in 49 C.F.R. § 199.105(a), (c) arising from the use of personnel for pipeline activities related to response and recovery. The stay which went into effect on October 10 will remain in effect for 45 days until November 24, unless PHMSA determines an extension is required. In addition, on October 10, PHMSA issued an Emergency Assistance Personnel waiver for Alabama, Florida, Georgia, North Carolina, and South Carolina affected by Hurricane Michael. For 30 days following October 10, PHMSA waived the notice required under 49 U.S.C. § 60118(d), which necessitates a 60-day review period for States to notify PHMSA that it intends to waive a pipeline safety regulation adopted by the State pursuant to State certification under 49 U.S.C. § 60105 for the above listed requirements.